

## APPENDIX A

### Comparability Ratios for the Major Causes of Death in *North Carolina Vital Statistics, Volume 2*

The comparability ratio is an adjustment factor that is applied to the number of deaths coded to a cause-of-death category under the International Classification of Diseases, 9<sup>th</sup> Revision (ICD-9) to make the number more comparable to the number coded under the 10<sup>th</sup> Revision (ICD-10). In North Carolina, causes of death were coded using ICD-9 from 1979 through 1998, and using ICD-10 beginning in 1999. The comparability ratios indicate the extent of discontinuities in cause-of-death trends resulting from implementing ICD-10. A large sample of 1996 United States deaths were classified by both ICD-9 and ICD-10 to develop the comparability ratios. The comparability ratio is the ratio of the number of deaths in the 1996 sample in an ICD-10 cause-of-death category to the number of deaths in the sample in the same category as coded under ICD-9. More detailed comparability ratios are available from the State Center for Health Statistics or in the publication of the National Center for Health Statistics titled *Comparability of Cause of Death Between ICD-9 and ICD-10: Preliminary Estimates* (National Vital Statistics Reports, Volume 49, Number 2; May 18, 2001).

CAUSE OF DEATH	COMPARABILITY RATIO
Heart disease .....	0.99
Cerebrovascular disease .....	1.06
Cancer .....	1.01
Cancer of colon, rectum, and anus .....	1.00
Cancer of trachea, bronchus, and lung .....	0.98
Cancer of breast .....	1.01
Cancer of prostate .....	1.01
Human immunodeficiency virus (HIV) disease .....	1.14
Septicemia .....	1.19
Diabetes mellitus .....	1.01
Pneumonia and influenza .....	0.70
Chronic lower respiratory diseases .....	1.05
Chronic liver disease and cirrhosis .....	1.04
Nephritis, nephrotic syndrome, and nephrosis .....	1.23
Unintentional motor vehicle injuries .....	0.85
All other unintentional injuries .....	1.08
Suicide .....	1.00
Homicide .....	1.00
Alzheimer's disease .....	1.55
Deaths from all causes .....	1.00

## APPENDIX B

### List of Selected Causes of Death (used for Tables E and F)

CAUSE OF DEATH	ICD-10 CODES*
Heart disease .....	I00-I09,I11,I13, I20-I51
Cerebrovascular disease .....	I60-I69
Atherosclerosis .....	I70
Cancer .....	C00-C97
Lip, oral cavity, and pharynx .....	C00-C14
Stomach .....	C16
Colon, rectum, and anus .....	C18-C21
Liver .....	C22
Pancreas .....	C25
Larynx .....	C32
Trachea, bronchus, and lung .....	C33-C34
Malignant melanoma of skin .....	C43
Breast .....	C50
Cervix uteri .....	C53
Ovary .....	C56
Prostate .....	C61
Bladder .....	C67
Brain .....	C71
Non-Hodgkins lymphoma .....	C82-C85
Leukemia .....	C91-C95
Human immunodeficiency virus (HIV) disease .....	B20-B24
Septicemia .....	A40-A41
Diabetes mellitus .....	E10-E14
Pneumonia and influenza .....	J10-J18
Chronic lower respiratory diseases .....	J40-J47
Chronic liver disease and cirrhosis .....	K70,K73-K74
Nephritis, nephrotic syndrome, and nephrosis .....	N00-N07,N17-N19,N25-N27
Motor vehicle injuries (unintentional) .....	V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2, V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1, V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2
All other unintentional injuries .....	V01,V05-V06,V09.1,V09.3-V09.9 V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9, V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9,V90-V99, W00-X59,Y85,Y86
Suicide .....	X60-X84,Y87.0
Homicide .....	X85-Y09,Y87.1
Alzheimer's disease .....	G30

\*International Classification of Diseases, Tenth Revision.

**APPENDIX C**  
**List of 51 Selected Causes of Death\***  
 (used for Tables A through D)

<b>CAUSE OF DEATH</b>	<b>ICD-10 CODES**</b>
Salmonella infections .....	A01-A02
Shigellosis and amebiasis .....	A03, A06
Tuberculosis .....	A16-A19
Whooping cough .....	A37
Scarlet fever and erysipelas .....	A38, A46
Meningococcal infection .....	A39
Septicemia .....	A40-A41
Syphilis .....	A50-A53
Acute poliomyelitis .....	A80
Arthropod-borne viral encephalitis .....	A83-A84, A85.2
Measles .....	B05
Viral hepatitis .....	B15-B19
Human immunodeficiency virus (HIV) disease .....	B20-B24
Malaria .....	B50-B54
Malignant neoplasms .....	C00-C97
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior .....	D00-D48
Anemias .....	D50-D64
Diabetes mellitus .....	E10-E14
Nutritional deficiencies .....	E40-E64
Meningitis .....	G00, G03
Parkinson's disease .....	G20-G21
Alzheimer's disease .....	G30
Diseases of heart .....	I00-I09, I11, I13, I20-I51
Essential (primary) hypertension and hypertensive renal disease .....	I10, I12
Cerebrovascular diseases .....	I60-I69
Atherosclerosis .....	I70
Aortic aneurysm and dissection .....	I71
Influenza and pneumonia .....	J10-J18
Acute bronchitis and bronchiolitis .....	J20-J21
Chronic lower respiratory diseases .....	J40-J47
Pneumoconioses and chemical effects .....	J60-J66, J68
Pneumonitis due to solids and liquids .....	J69
Peptic ulcer .....	K25-K28
Diseases of appendix .....	K35-K38
Hernia .....	K40-K46
Chronic liver disease and cirrhosis .....	K70, K73-K74
Cholelithiasis and other disorders of gallbladder .....	K80-K82

## **APPENDIX C (continued)**

Nephritis, nephrotic syndrome and nephrosis .....	N00-N07, N17-N19, N25-N27
Infections of kidney .....	N10-N12, N13.6, N15.1
Hyperplasia of prostate .....	N40
Inflammatory diseases of female pelvic organs .....	N70-N76
Pregnancy, childbirth and the puerperium .....	O00-O99
Certain conditions originating in the perinatal period .....	P00-P96
Congenital malformations, deformations and chromosomal abnormalities.....	Q00-Q99
Motor vehicle injuries .....	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
All other unintentional injuries .....	V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90-V99, W00-X59, Y85, Y86
Intentional self-harm (suicide) .....	X60-X84, Y87.0
Assault (homicide) .....	X85-Y09, Y87.1
Legal intervention .....	Y35, Y89.0
Operations of war and their sequelae .....	Y36, Y89.1
Complications of medical and surgical care .....	Y40-Y84, Y88

\*List adapted from rankable causes in the list of 113 causes of death developed by the National Center for Health Statistics.

\*\*International Classification of Diseases, Tenth Revision.

**APPENDIX D**  
**List of 72 Selected Causes of Infant Death\***  
(used for Table A, Ages <1)

<b>CAUSE OF DEATH</b>	<b>ICD-10 CODES**</b>
Diarrhea and gastroenteritis of presumed infectious origin .....	A09
Tuberculosis .....	A16-A19
Tetanus .....	A33, A35
Diphtheria .....	A36
Whooping cough .....	A37
Meningococcal infection .....	A39
Septicemia .....	A40-A41
Congenital syphilis .....	A50
Gonococcal infection .....	A54
Acute poliomyelitis .....	A80
Varicella (chickenpox).....	B01
Measles .....	B05
Human immunodeficiency virus (HIV) disease .....	B20-B24
Mumps .....	B26
Candidiasis .....	B37
Malaria .....	B50-B54
Pneumocystosis .....	B59
Malignant neoplasms .....	C00-C97
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior .....	D00-D48
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism .....	D50-D89
Short stature, not elsewhere classified .....	E34.3
Nutritional deficiencies .....	E40-E64
Cystic fibrosis .....	E84
Volume depletion, disorders of fluid, electrolyte and acid-base balance .....	E86-E87
Meningitis .....	G00, G03
Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) .....	G12.0
Infantile cerebral palsy .....	G80
Anoxic brain damage, not elsewhere classified .....	G93.1
Diseases of the ear and mastoid process .....	H60-H93
Diseases of the circulatory system .....	I00-I99
Acute upper respiratory infections .....	J00-J06
Influenza and pneumonia .....	J10-J18
Acute bronchitis and acute bronchiolitis .....	J20-J21
Bronchitis, chronic and unspecified .....	J40-J42
Asthma .....	J45-J46
Pneumonitis due to solids and liquids .....	J69
Gastritis, duodenitis, and noninfective enteritis and colitis .....	K29, K50-K55
Hernia of abdominal cavity and intestinal obstruction without hernia .....	K40-K46, K56
Renal failure and other disorders of kidney .....	N17-N19, N25, N27

## Appendix D (continued)

Newborn affected by maternal hypertensive disorders .....	P00.0
Newborn affected by other maternal conditions which may be unrelated to present pregnancy .....	P00.1-P00.9
Newborn affected by maternal complications of pregnancy .....	P01
Newborn affected by complications of placenta, cord and membranes .....	P02
Newborn affected by other complications of labor and delivery .....	P03
Newborn affected by noxious influences transmitted via placenta or breast milk .....	P04
Slow fetal growth and fetal malnutrition .....	P05
Disorders related to short gestation and low birth weight, not elsewhere classified .....	P07
Disorders related to long gestation and high birth weight .....	P08
Birth trauma .....	P10-P15
Intrauterine hypoxia and birth asphyxia .....	P20-P21
Respiratory distress of newborn .....	P22
Congenital pneumonia .....	P23
Neonatal aspiration syndromes .....	P24
Interstitial emphysema and related conditions originating in the perinatal period .....	P25
Pulmonary hemorrhage originating in the perinatal period .....	P26
Chronic respiratory disease originating in the perinatal period .....	P27
Atelectasis .....	P28.0-P28.1
Bacterial sepsis of newborn .....	P36
Omphalitis of newborn with or without mild hemorrhage .....	P38
Neonatal hemorrhage .....	P50-P52, P54
Hemorrhagic disease of newborn .....	P53
Hemolytic disease of newborn due to isoimmunization and other perinatal jaundice .....	P55-P59
Hematological disorders .....	P60-P61
Syndrome of infant of a diabetic mother and neonatal diabetes mellitus .....	P70.0-P70.2
Necrotizing enterocolitis of newborn .....	P77
Hydrops fetalis not due to hemolytic disease .....	P83.2
Congenital malformations, deformations and chromosomal abnormalities .....	Q00-Q99
Sudden infant death syndrome .....	R95
Motor vehicle injuries .....	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
All other unintentional injuries .....	V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90-V99, W00-X59, Y85, Y86
Assault (homicide) .....	X85-Y09, Y87.1
Complications of medical and surgical care .....	Y40-Y84, Y88

\*List adapted from rankable causes in the list of 130 causes of infant death developed by the National Center for Health Statistics.

\*\*International Classification of Diseases, Tenth Revision.